

AMENDMENTS TO THE CLAIMS:

Please amend the claims as follows:

1. (Currently Amended) A method of storing channel information in a digital television receiver, comprising:

tuning to a selected physical channel;

reading program specific information (PSI) on the selected physical channel;

determining from the PSI whether the physical channel is PSIP compliant, and if not, then directly concluding that the physical channel is an MPEG compliant channel, where said concluding is based exclusively upon the determination that the channel is not PSIP compliant;

storing tuning data for tuning the digital television receiver in no more than exactly three lookup tables, the tables storing data as follows:

storing in a first lookup table an attribute associated with the major channel ~~an attribute~~ explicitly designating as a table entry that a major channel associated with the physical channel is or is not a PSIP compliant channel, and where the table data entries consist of major channel numbers and their associated attribute designating whether or not the table major channel is or is not a PSIP compliant channel;

if the selected physical channel is a PSIP compliant channel:

storing a TSID corresponding to the selected physical channel as an entry associated with the PSIP compliant physical channel ~~entries~~ in a second lookup table; and

storing a major channel corresponding to the selected physical channel's TSID as entries in a third lookup table; and

if the selected physical channel is an MPEG compliant channel:

storing no additional attributes in the second and third lookup tables;

whereby, tuning of an MPEG compliant channel is carried out without reference to the second and third channel.

2. (Currently Amended) The method of claim 1, further comprising:

incrementing the physical channel;

tuning to the incremented physical channel;

reading program specific information on the incremented physical channel;
determining from the PSI whether the incremented physical channel is PSIP compliant,
and if not, then directly concluding that the physical channel is an MPEG compliant channel,
where said concluding is based exclusively upon the determination that the channel is not PSIP
compliant;
storing tuning data for tuning the digital television receiver in no more than exactly three
lookup tables, the tables storing data as follows:
storing an attribute associated with the major channel ~~an attribute~~ in the first lookup table
designating whether the incremented physical channel is a PSIP compliant channel;
if the incremented physical channel is a compliant PSIP channel:
storing a TSID corresponding to the incremented physical channel as an entry associated with the
PSIP compliant physical channel ~~entries~~ in the second lookup table; and
storing a major channel corresponding to the incremented physical channel's TSID as entries in
the third lookup table; and
if the selected physical channel is an MPEG compliant channel:
storing no additional attributes in the second and third lookup tables;
whereby, tuning of an MPEG compliant channel is carried out without reference to the
second and third channel.

3. (Original) The method of claim 2, further comprising after the incrementing, determining if
selected physical channel is a last physical channel, and if so, then stopping.

4. (Previously Presented) The method of claim 3, carried out as an automatic channel
programming process in a digital television receiver.

5. (Previously Presented) The method of claim 4, wherein the lookup tables are stored in a
non-volatile memory device.

6.-7. (Cancelled)

8. (Currently Amended) A method of autoprogramming channel information in a digital television receiver, comprising for each of a plurality of N physical channels:

tuning to a selected physical channel;

reading program specific information (PSI) on the selected physical channel;

determining from the PSI whether the physical channel is PSIP compliant, and if not, then directly concluding that the physical channel is an MPEG compliant channel, where said concluding is based exclusively upon the determination that the channel is not PSIP compliant;

storing tuning data for tuning the digital television receiver in no more than exactly three lookup tables, the tables storing data as follows:

storing in a first lookup table an attribute associated with the major channel ~~an attribute~~ explicitly designating as a table entry that a major channel associated with the physical channel is or is not a PSIP compliant channel, and where the table data entries consist of major channel numbers and their associated attribute designating whether or not the table major channel is or is not a PSIP compliant channel;

if the selected physical channel is a compliant PSIP channel:

storing a TSID corresponding to the selected physical channel as an entry associated with the PSIP compliant physical channel ~~entries~~ in a second lookup table; and

storing a major channel corresponding to the selected physical channel as entries in a third lookup table; and

if the selected physical channel is an MPEG compliant channel:

storing no additional attributes in the second and third lookup tables;

whereby, tuning of an MPEG compliant channel is carried out without reference to the second and third channel.

9. (Currently Amended) A method of storing channel information in a digital television receiver, comprising:

tuning to a selected physical channel;

reading program specific information (PSI) on the selected physical channel;

determining from the PSI whether the physical channel is PSIP compliant, and if not, then directly concluding that the physical channel is an MPEG compliant channel, where said concluding is based exclusively upon the determination that the channel is not PSIP compliant;

storing tuning data for tuning the digital television receiver in no more than exactly three lookup tables, the tables storing data as follows:

storing in a first lookup table an attribute associated with the major channel ~~an attribute~~ explicitly designating as a table entry that a major channel associated with the physical channel is or is not a PSIP compliant channel, and where the table data entries consist of major channel numbers and their associated attribute designating whether or not the table major channel is or is not a PSIP compliant channel;

if the selected physical channel is a PSIP compliant channel:
storing a TSID corresponding to the selected physical channel as an entry associated with the PSIP compliant physical channel ~~entries~~ in a second lookup table; and
storing a major channel corresponding to the selected physical channel's TSID as entries in a third lookup table; and
storing a major channel corresponding to the selected physical channel as entries in a third lookup table; and

if the selected physical channel is an MPEG compliant channel:
storing no additional attributes in the second and third lookup tables;
incrementing the physical channel;
tuning to the incremented physical channel;
reading program specific information on the incremented physical channel;
determining from the PSI whether the incremented physical channel is PSIP compliant, and if not, then directly concluding that the physical channel is an MPEG compliant channel, where such concluding is based exclusively upon the determination that the channel is not PSIP compliant;

storing an attribute associated with the major channel ~~an attribute~~ in the first lookup table designating whether the incremented physical channel is a PSIP compliant channel;

if the incremented physical channel is a compliant PSIP channel:

storing a TSID corresponding to the incremented physical channel as an entry associated with the PSIP compliant physical channel ~~entries~~ in the second lookup table; and

storing a major channel corresponding to the incremented physical channel's TSID as entries in the third lookup table; and

if the selected physical channel is an MPEG compliant channel:

storing no additional attributes in the second and third lookup tables;

whereby, tuning of an MPEG compliant channel is carried out without reference to the second and third channel.

10. (Original) The method of claim 9, further comprising after the incrementing, determining if selected physical channel is a last physical channel, and if so, then stopping.

11.-13. (Cancelled)

14. (Previously Presented) The method of claim 10, wherein the three lookup tables are stored in a non-volatile memory device.